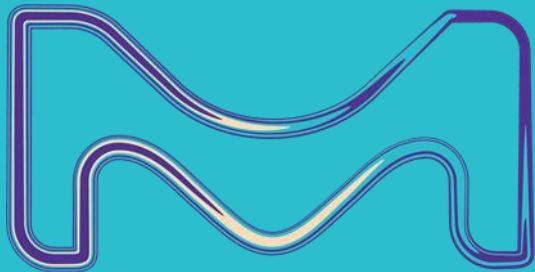


Packaging Sustainability:

How patients' perspectives can accelerate the implementation

Kathrin Gallistl, Packaging Artwork Director Merck



MERCK

We are a
VIBRANT
SCIENCE AND
TECHNOLOGY COMPANY



 Watch our movie

We have only a few decades to fundamentally change the ways in which we consume food, energy and other resources while addressing global inequity in health, education and living standards.

Belén Garijo

**Chair of the Executive Board and CEO
of Merck**



Scope 3 -Decarbonizing: Resource consumption reduction



Waste recycling (example)

Take-back programs are a way to enter the age of circular economy

Waste = resource

Industry consortia or stand-alone take-back programs

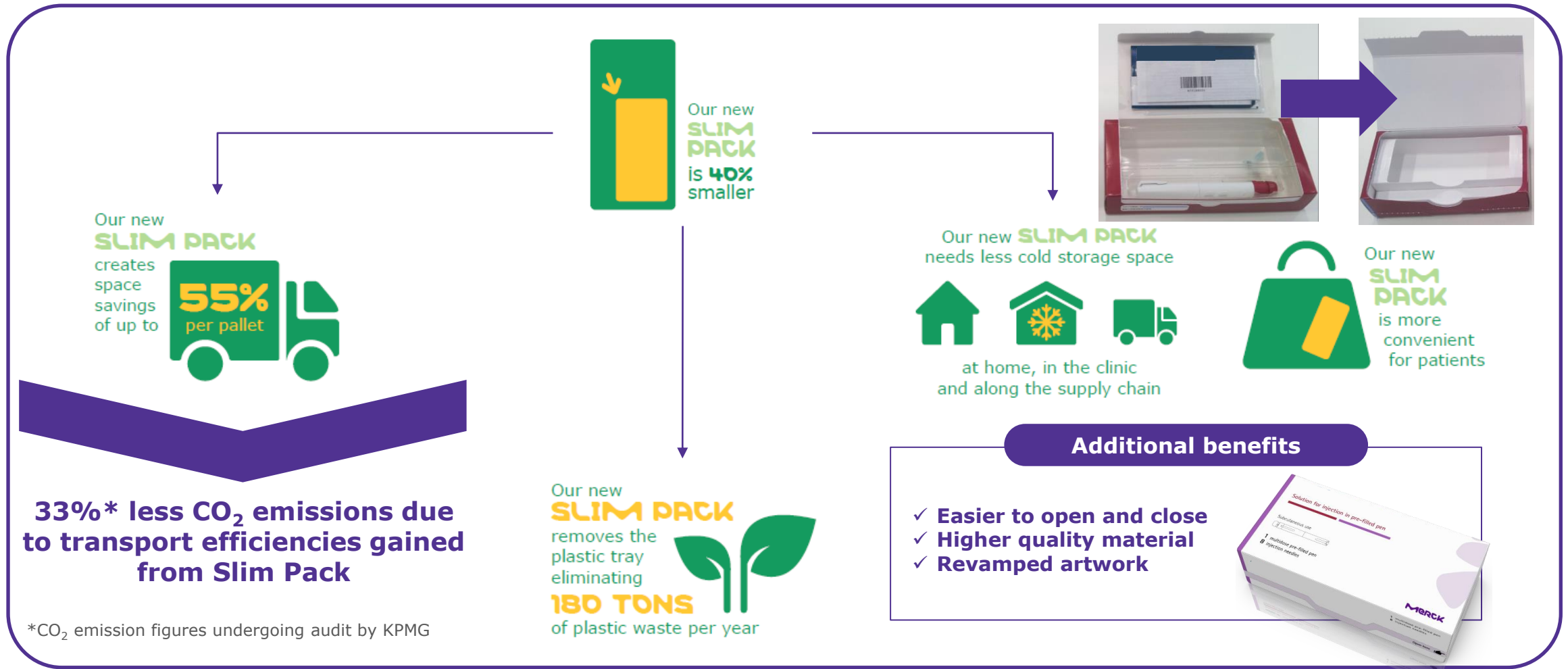
Example: Take-back pilot of injector pens in Denmark – a multi-company industry consortia to be launched in Denmark



https://www.linkedin.com/feed/update/urn:li:activity:7056537338620858368?utm_source=share&utm_medium=member_desktop

Waste reduction (example 1)

Packaging optimization is an impactful approach with good return



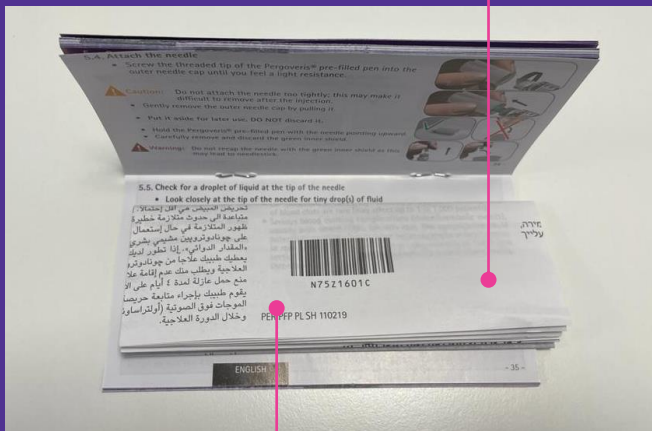
*CO₂ emission figures undergoing audit by KPMG

Waste Reduction (example 2)

Challenge

- Material quality and booklet format over elaborated
- Multiple configurations create operational and compliance complexity
- Impractical layout for patients

PIL and IFU different format and size



PIL glued in the middle

Solution

- Change Format & Material
- Harmonize Shape & Size
- Improve Usability



MERCK

From booklets to paper leaflet...

What are the benefits?

Act Sustainably

WE DESIGN FOR THE **FUTURE**

-50*
tons/year

of **paper** shipped to Merck sites (inbound) and around the globe (outbound), thanks to the new **format** and **material** used.

-110*
tons/year

CO₂ emissions equivalent to a **reduction of 40%** compared to current situation.

Simplify & act with urgency

WE DESIGN FOR THE **BUSINESS**



Expected continual **saving** thanks to the **switch from BOOKLET to LEAFLET format**. It mainly brings:

- Lower CoGs for leaflets
- Reduced scrap costs
- Reduced inventory

Strengthen Operations

WE DESIGN FOR **OPERATIONS**

-30%*
No. SKU

of semi-finished products¹ as well as faster implementation of mass-changes and **more agile** value chain.

-100*
artworks

to be managed and a **seamless switch of production** among sites, with artwork automation, harmonization and merge configurations

¹ Semi-finished product is the combination of PIL+IFU as received by the Merck sites. Calculated in December-2022.

Obsessed with patients

WE DESIGN FOR **PATIENTS**

Improved patient
experience

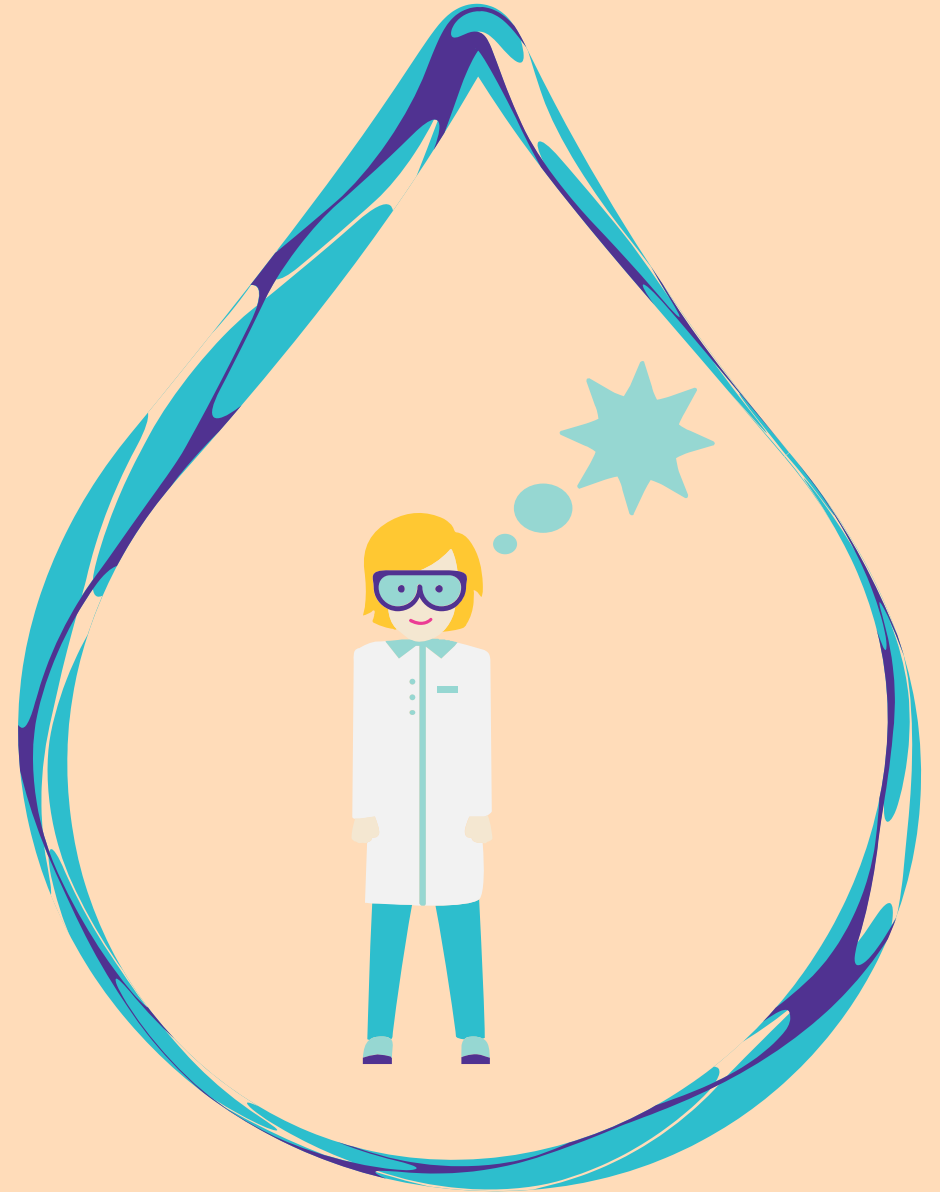
"State-of-the-art" format and layout, to better guide patients through use steps and facilitate reading. All information **at a glance**, and more convenient format with content only in the required language.



How can patients' perspectives accelerate the implementation?

Reflections

1. Sustainability initiatives are easy to implement when there is neutral or positive impact on the profitability
2. The wide range of initiatives partially require investments (equipment, room...)
3. Patient perspective on initiatives can help to prioritize the assessment on operations level
4. Tangible initiatives on packaging and pens seem to be perceived as most compelling by HCPs and patients
5. A "green label" could help to make the sustainability efforts of each product pack more visible
6. An equation for "green image" versus investments can support decision making process





Thank you

Let's work together to
**create a sustainable future
for everyone.**